EV718139110US

## 10/542540

JC17 Rec'd PCT/PTO 18 JUL 2005

DOCKET: CU-4300

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Peter ROHRIG

TITLE: VALVE ASSEMBLY

THE COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, VA 22313-1450

## AMENDED CLAIMS

- 1. (currently amended) A valve assembly (3) for a substantially elastic drinking mouthpiece (4) of a liquid container, which includes a flexible membrane (4) having at least one valve opening (5) and a substantially rigid membrane supporting element (7) having at least one valve opening (15), wherein, with the valve assembly (3) being in a closed position, the membrane (4) rests on the membrane supporting element (7) and the valve opening (5) of the membrane (4) is sealingly covered by the membrane supporting element (7) and the valve opening (15) of the membrane supporting element (7) is sealingly covered by the membrane (4), the membrane (4) being inwardly curved in said closed position, characterized in that wherein during the external application of pressure to the drinking mouthpiece (2) and/or the application of an underpressure at the membrane side facing away from the membrane supporting element (7), the membrane (4) is in a resnapped, outwardly curved open position in which the valve openings (5, 15) of the membrane (4) and membrane supporting element (7), respectively, are released.
- 2. (currently amended) A valve assembly according to claim 1, characterized in that wherein the membrane (4) is each substantially conical in its closed and open positions.
- 3. (currently amended) A valve assembly according to claim 1 or 2, characterized in that wherein the membrane supporting element (7) comprises a valve seat surface (8) substantially corresponding with the inwardly curved shape of the membrane (4) in its closed position.

- 4. (currently amended) A valve assembly according to any one of claims 1 to 3, characterized in that claim 1, wherein the drinking mouthpiece (1) comprises a latch groove (6) intended to receive the membrane supporting element (7) configured as a latch body.
- 5. (currently amended) A valve assembly according to any one of claims 1 to 4, characterized in that claim 1, wherein the membrane supporting element (7) is connected with a fastening ring (10) via a web (9).
- 6. (currently amended) A valve assembly according to any one of claims 1 to 5, characterized in that claim 5, wherein the drinking mouthpiece (1) is designed to be substantially oval in top view.
- 7. (currently amended) A valve assembly according to claims 6 and 5, characterized in that claim 6, wherein the web (9) used to fasten the membrane supporting element (7) is designed in a plate-shaped manner with the plane defined by the plate-shaped web (9) extending in the direction of the longer axis of the drinking mouthpiece (1) in top view.
- 8. (currently amended) A valve assembly according to any one of claims 1 to 7, characterized in that claim 1, wherein the membrane (4) comprises several valve openings (5) arranged along a circular line.
- 9. (currently amended) A valve assembly according to any one of claims 1 to 8, characterized in that claim 1, wherein the membrane supporting element (7) comprises a substantially central valve opening (15).
- 10. (currently amended) A valve assembly according to any one of claims 1 to 9, characterized in that claim 1, wherein the mouthpiece (1), formed as a drinking spout,

extends beyond the membrane (4), whereby an elevated drinking spout edge (17) is formed as a membrane protection and spacer element.

- 11. (currently amended) A valve assembly according to any one of claims 1 to 10, characterized in that claim 1, wherein the drinking mouthpiece (1) is made of an elastomer material and, in particular, a thermoplastic elastomer (TPE).
- 12. (currently amended) A valve assembly according to any one of claims 1 to 11, characterized in that claim 1, wherein the membrane supporting element (7) is made of polypropylene (PP).
- 13. (currently amended) A drinking mouthpiece (1) for a liquid container, including a valve assembly (3) according to any one of claims 1 to 10 claim 1 and arranged on a lid (2) including an opening for the passage of liquid.
- 14. (currently amended) A drinking mouthpiece according to claim 13, characterized in that wherein the soft drinking mouthpiece (1), which is preferably made of a thermoplastic elastomer (TPE), is produced by a multi-component injection molding process in one piece with the hard lid (2), which is preferably made of polypropylene (PP).
- 15. (currently amended) A drinking mouthpiece according to claim 13 er 14, wherein the lid (2) includes an air valve (13) having an annular membrane and at least one air passage opening (19), characterized in that, wherein a reception element (21) including a peripheral groove to the inner side of the lid and comprises at least one air entry opening (20) communicating with the air passage opening (19) of the lid (2) and leading into the groove (24), wherein a ring (11) is insertable or inserted in the groove (24) and the air entry opening (20) is sealed at equal pressures on either side of the air entry opening (20) and at an overpressure at the inner side of the lid, due to the bias of at least one groove wall (26) designed as an annular membrane, and the air entry opening (20) is released at an underpressure at the inner side of the lid.

- 16. (currently amended) A drinking mouthpiece according to claim 15, characterized in that wherein the end region (28) of the ring (11) facing the air entry opening (20) of the reception element (21) in the inserted position of the ring (11) is designed to be substantially conical in cross section.
- 17. (currently amended) A drinking mouthpiece according to claim 15 or 16, characterized in that, wherein the end region (28) of the ring (11) facing the air entry opening (20) of the reception element (21) in the inserted position of the ring comprises at least one recess (29).
- 18. (currently amended) A drinking mouthpiece according to any one of claims 15 to 17, characterized in that claim 15, wherein the ring (11) is fixable or fixed in the reception element (21) by the aid of a snap connection.
- 19. (currently amended) A drinking mouthpiece according to claim 18, <del>characterized in that wherein the ring (11) comprises on its outer side a circumferential bead (25) for snapping into the groove (24) of the reception element (21).</del>
- 20. (currently amended) A drinking mouthpiece according to any one of claims 15 to 19, characterized in that claim 15, wherein the inner groove wall (26) is designed as an annular membrane.
- 21. (currently amended) A drinking mouthpiece according to any one of claims 15 to 20, characterized in that claim 15, wherein the annular membrane (26) comprises at least one thin spot (27) to fix the bias of the annular membrane.
- 22. (currently amended) A drinking mouthpiece according to any one of claims 15 to 21, characterized in that claim 15, wherein the fastening ring (10) extending in the direction of the lid opening (2') is connected with the ring (11) via an inwardly extending connection flange (12).

- 23. (currently amended) A drinking mouthpiece according to claim 22, <del>characterized in that</del> wherein at least one ventilation opening <del>(30)</del> is provided in the connection flange <del>(12)</del>.
- 24. (currently amended) A drinking mouthpiece according to claim 23, characterized in that wherein the ventilation opening (30) of the connection flange (29), in the inserted position of the ring (11), is located adjacent to the inner groove wall (26) designed as an annular membrane.
- 25. (new) A valve assembly according to claim 11, wherein the drinking mouthpiece is made of a thermoplastic elastomer (TPE).
- 26. (new) A drinking mouthpiece according to claim 14, wherein the soft drinking mouthpiece is made of a thermoplastic elastomer (TPE), and the hard lid is made of polypropylene (PP).